



SKILLS ↗

Language	Java, Python, C, C++, Solidity,Git, L ^A T _E X, C#, Bash,PHP, JavaScript, Matlab, SQL
Frontend	HTML5, CSS, JS, Bootstrap, React
Backend	Flask, Django, ASP.NET Core, Node.js
Database	MySQL, Firebase, MongoDB
IOT & Robotics	Arduino, Raspberry PI, Jetson Nano & Xavier, LIDAR, ZED-Stereo Cam, ESP-32,PX4 (Pixhawk),ROS,ROS2,MAVROS
App Development	Flutter, Dart
Soft Skills	English (business), Bengali (business), Public Speaking, Extempore Speech
Pentesting Tools	Burp Suite, Metasploit, NMap, SQLMap, Wireshark, Nessus, John The Ripper, Hashcat, Dirb, Volatility, Parrot OS
Other	DSA, OOP, Containerization, Networking & Linux, PyTorch, Azure, CI/CD, TensorFlow, Git, Docker, Office Tools

PROJECTS | CERTIFICATIONS ↗

Software & Autonomous System Developer 2021 - 2023
Mars Society's University Rover Challenge (URC) USA
Anatolian Rover Challenge (ARC) UKET,Turkey

- Developed an autonomous rover system with my team for URC-2021 competition **champion globally beating 88 teams**. [Link](#).
- Upgraded the autonomous rover system for ARC-2022 competition **became third among 14 final contestant countries**. [Link](#)
- Software & Autonomous Team Lead For URC-2023 & ARC-2023 (2nd in Asia, 5th Globally)

Pretrained CNN-based Dog Classifier [Code](#)[Certificate](#)

Tech Stack Python,ResNET,VGG16, Machine Learning

NLTK LSTM Based HateSpeech Detection | [Code](#)

Tech Stack ML, NLP, LSTM, Python

Bus Counter Management System Using JavaFX | [Code](#)

Tech Stack Swing, JavaFX, Java, Spring Boot

MERMS | [Code](#)

Tech Stack HTML, CSS, React.JS, Vue.js, PHP, OracleDB

Simple weight machine using HX711 and Arduino | [Code](#)

Tech Stack Arduino, IOT, HX711 sensor

SoccerBot

Tech Stack Arduino,C++

DekhboKinbo | [Code](#)

Tech Stack C#, .NET Core MVC,Entity, MySQL

Alumni Information Management System | [Code](#)

Tech Stack C#, MySQL

Blockchain-based Land Record management system with biometric authentication | [Blockchain \(Contract\)](#) | [Web-site](#)

Tech Stack Blockchain, Django, IOT, Jira, Manual testing

PyTorch-Create Your Own Classifier [Code](#)[Certificate](#)

Tech Stack Python, CNN, Machine Learning, AWS, Udacity

RESEARCH & PUBLICATIONS (5+) ↗ SCHOLAR ↗

- DeepTriNet: A Tri-Level Attention Based DeepLabv3+ Architecture for Semantic Segmentation of Satellite Images.[Link](#) [got the best paper award]
- Performance Analysis of Various EfficientNet Based U-Net++ Architecture for Automatic Building Extraction from High Resolution Satellite Images.[Link](#)
- CycleGAN-Based Data Augmentation with CNN and Vision Transformers (ViT) Models for Improved Maize Leaf Disease Classification.[Link](#)
- Biomolecular Analysis of Soil Samples and Rock Imagery for Tracing Evidence of Life Using a Mobile Robot [Accepted at ICRAIE - 2023]
- Enhancing Mango Leaf Disease Classification: ViT, BiT, and CNN-Based Models Evaluated on CycleGAN-Augmented Data [Accepted at ICCIT-2023]
- SecureLandChain: A Blockchain-Based Land Registry System with Biometric Authentication and Certificate Verification System [Submitted for a Q1]
- Automatic Literature Review Generation : An Improved LLM-RAG Based Solution Embedded With Regex and T5. [Thesis]

EXPERIENCE ↗

Internship Jan 2023 - Feb 2023
Brainstation 23 Mirpur DOHS

- Got hands on training on C# and ASP.NET MVC through Brainstation 23's LMS. During the course, I completed one desktop application project and two web-based projects using ASP.NET .

Capture The Flag (CTF)

[TryHackMe](#)

Mentor (Later Vice-President), MIST Cyber Security Club

- Certified for "Junior Penetration Tester" [\[link\]](#)
- Certified for "Attacking Active Windows Directory"[\[link\]](#)[\[Badge\]](#).
- Became top 4 % on TryHackMe globally . [\[link\]](#)
- Mentor at MIST Cyber Security Club
- 24th place nationally as team lead in LeetCon CTF 2023.
- Achieved 79th place globally in Kaspersky codebreakers CTF.
- Global rank 97 at BlackHatMEA 2023 CTF Finals[\[link\]](#)

[Stackoverflow](#) ↗ | [AskUbuntu](#) ↗

Provided 4 solutions

- Solution links : [1](#) [2](#) [3](#) [4](#)

Competitive programming

2020 - Present

- Solved over 250+ problems on GeeksForGeeks, Codeforces and Leetcode

EDUCATION ↗

B.Sc in Computer Science and Engineering 2020 - 2024
Military Institute of Science and Technology

Higher Secondary School Certificate 2017 - 2019
Barishal Cadet College